

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A multi-functioned wafer aligner comprising:
a multi-functioned unit for performing wafer centering, wafer flat zone alignment, and wafer damage detection;
the multi-functioned unit comprising:
a wafer rotator;
a sensor body comprising;
an array of luminous emitters disposed on a first surface of the sensor body for emitting incident rays toward a wafer disposed on the wafer rotator; and
an array of photo detecting sensors disposed on a second surface of the sensor body opposite the first surface for receiving the incident rays emitted by the array of luminous emitters; and
an array of damage-detecting sensors disposed on a third surface of the sensor body for receiving the incident rays that are reflected from edges of a wafer to detect wafer damage; and
a processor for determining positions of the wafer for performing the wafer centering and the wafer flat zone alignment based on light received by the array of photo detecting sensors, and determining wafer damage based on light received by the array of damage detecting sensors by calculating an accumulated digital signal inputted from the multi-functioned unit.

2. Cancelled

3. (Currently amended) The multi-functioned wafer aligner of claim 21,
wherein the array of photo detecting sensors receive no incident ray when the
wafer interrupts the incident rays from the array of luminous emitters.

4. (Currently amended) The multi-functioned wafer aligner of claim 61,
wherein the processor further comprises an alarm unit when the second area
receives reflected rays.

5. Cancelled

6. (Previously presented) The multi-functioned wafer aligner of claim
1, wherein a first area in the array of damage-detecting sensors receives
reflected rays when the wafer is not damaged, and a second area in the array of
damage-detecting sensors receives reflected rays when the wafer is damaged.

7. (Currently amended) A multi-functioned wafer aligner comprising:
a rotatable chuck, adapted to receive a semiconductor wafer;
a wafer transfer unit, adapted to position said wafer upon said rotatable
chuck;
a sensor body, comprising:
~~a position compensator for performing wafer centering;~~

an array of luminous source emitters disposed on a first surface of
the sensor body for emitting incident rays; and

an array of photo detecting sensors disposed on a second surface
of the sensor body opposite the first surface for receiving the incident
rays emitted by the array of luminous emitters; and

a wafer damage detector comprising an array of damage-detecting
sensors disposed on a third surface of the sensor body orthogonal to the
first surface and the second surface for adapted to receive receiving said
light rays emitted from said luminous source that is reflected off of the an
edge of said wafer; wherein said sensor body is disposed in relation to
said rotatable chuck so as to receive an edge of said wafer-within said
position compensator.

8-10. Cancelled

11. (New) A method for positioning a wafer and detecting wafer
damage, the method comprising:

inserting a peripheral region of a wafer to a sensor body;
emitting rays from an array of luminous emitters on a first surface of the
sensor body;

receiving emitted rays by an array of photo detecting sensors on a second
surface of the sensor body opposite the first surface; and

determining a position of the wafer based on the emitted rays received by the array of photo detecting sensors.

12. (New) The method of claim 11, further comprises receiving light from an array of damage detecting sensors on a third surface of the sensor body orthogonal to the first surface and the second surface of the sensor body.

13. (New) The method of claim 12, further comprises determining if wafer damages exist based on emitted rays received by the array of damage detecting sensors.